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**Redescription of *Sericostoma flavicorne* SCHNEIDER, 1845 and a new species of genus *Sericostoma* LATREILLE from Turkey (Trichoptera, Sericostomatidae)**

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**Abstract.** A redescription with figures, with particular reference to variability, of the male of *Sericostoma flavicorne* SCHNEIDER, 1845 is given, based on the material collected from the type locality Gelemiş in the southwestern Anatolia. *Sericostoma ida* n.sp. from northwestern Anatolia is described and figured.

**Introduction**

One of the big taxonomic problems in European Trichoptera is the identification of species of the genus *Sericostoma*. Variability is high (see e.g. MALICKY 1983:245), and even if the distinction between species is clear to the workers for ecological reasons, it is often not sure which name validly applies to the species in question. As a convention, most authors have accepted that the widespread Central European species with the larger maxillary palps is called *S. flavicorne*, but, as type specimens are not in existence, nobody knows what *flavicorne* is. Other authors have used the name *S. schneideri* for this insect, whose identity is equally unknown.

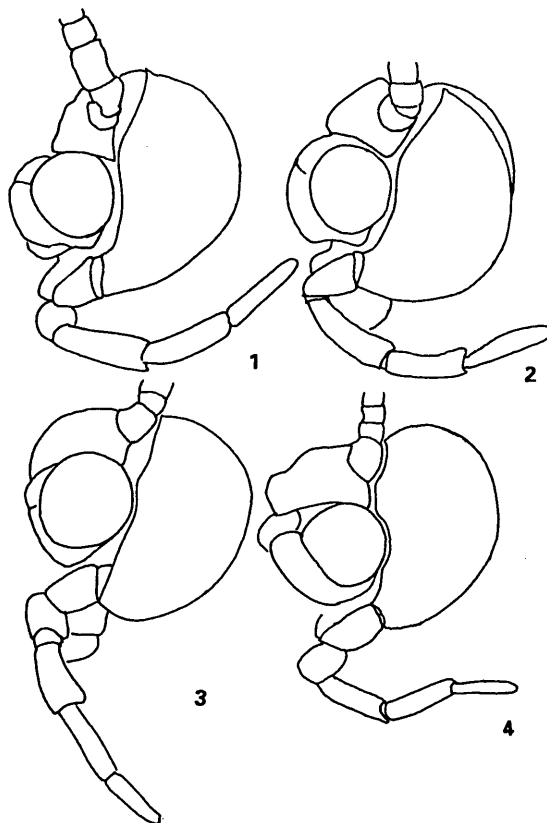
*Sericostoma flavicorne* was described but not figured by Schneider in 1845 from a locality which he gave, in phonetic translation to the Latin alphabet, "Kellemisch". In this time the Arabic alphabet was used in Turkey. Today, the name is written as Gelemiş. SCHMIDT (1954) was the first to find out that this place is in the region of Kalkan and Patara (SIPAHILER & MALICKY, 1987). Gelemiş is the official name of Patara village. Patara is the old name of the town and is preferred for touristic reasons.

In May 1999, I was there to find *S. flavicorne* and began to search from Gelemiş along the river through the north. The river Koca Çay (=Eşen Çayı) is located between Gelemiş and Fethiye, and in the delta near Gelemiş it is slowly flowing. The lower part of the river is rather destroyed by water canals for agriculture and the removal of sand from its bed. *S. flavicorne* is a rhitobiont species and does not live in such habitats as the delta. Finally, I found specimens of *S. flavicorne* north of Gelemiş, on the tributary of Eşen Çayı, on Seki Çayı at 100 m altitude. The specimens were collected while they were flying on the trees. Here is the description of these specimens which may be considered topotypes.

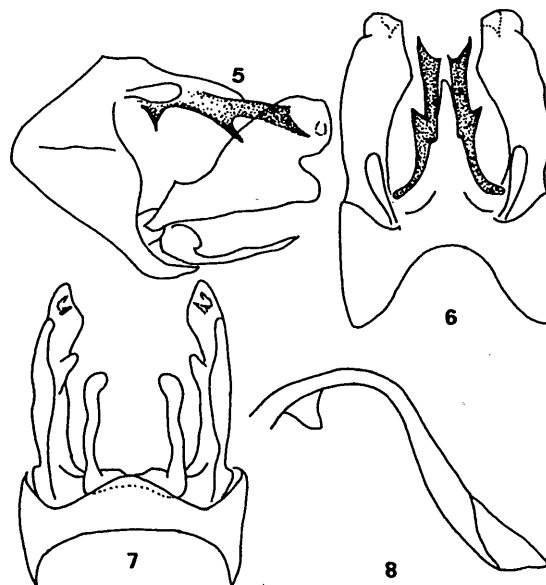
***Sericostoma flavicorne* SCHNEIDER, 1845**

**Material examined:** Turkey, Fethiye, Gelemiş, 45 km north of Gelemiş, tributary of Eşen Çayı, Seki Çayı, (36° 29'N, 29° 17'E), 100 m, 22.5.1999, 16 males and 7 females, leg and coll. Sipahiler.

Antennae brown; scapus blackish; the first 9-12 segments after the scapus are dark brown annulated on the subapical part; maxillary palpi blackish, very large, gradually rounded or dilated dorsally (Figs.1-4); coxa and femur blackish; tibiae and tarsi yellowish. Wings dark brown; the anterior wings are pale spotted on the base of costa, along subcosta and media; there are large pale spots on the anastomosis and along the media; the posterior wings with long fringes on the basal margin, which are found also on the petiole of fork 5 and on the anal veins. Length of the anterior wing of males 10-11 mm, of females 11-13 mm. Male genitalia (Figs.5-8): Segment 9 is roundly dilated on the dorsal half of the anterior edge; in ventral view, the posterior edge is dilated forming an almost rounded lobe medially. This lobe shows variations, can be short or long, round or triangular in shape (Figs. 9-14). The preanal appendages are rather long and oval. The median part of segment 10 is apically rounded at the apex. It can be narrow or broader, and the apex can be bilobed. The sclerotized prolongations of segment 10 are composed of two branches, which are pointed at the tips. In lateral view, the sclerotized prolongation of segment 10 is roundly excised between the basal projection and the median projection (Figs. 15-20); the median branch is shorter and directed posterior-



Figs. 1-4: *Sericostoma flavicorne*, male head, lateral.

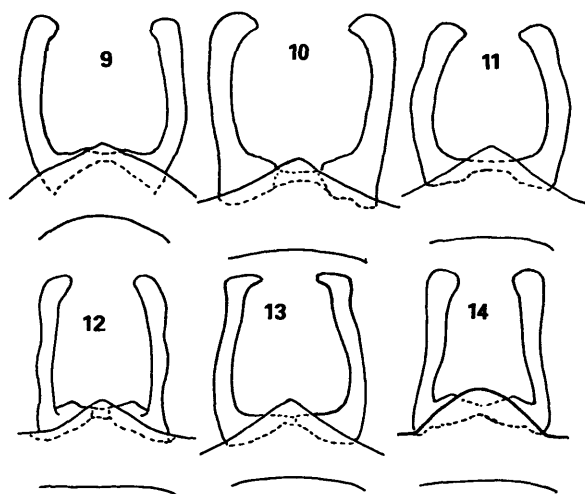


Figs. 5-8: *Sericostoma flavicorne*, male genitalia; 5, lateral; 6, dorsal; 7, ventral; 8, aedeagus, lateral.

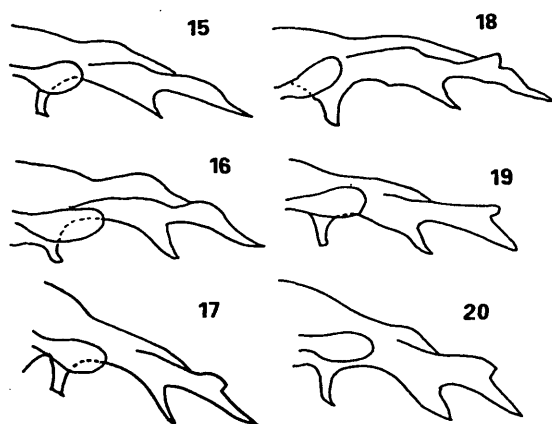
ventral and more or less seen dorsally. In dorsal view, the subdistal part is dilated and forms a pointed projection on the inner surface, which can also be in different shapes, smooth or rounded lobe (Figs. 21-26); in lateral view, the basal projection located near the preanal appendages is also acute at the tip. The upper branch of the inferior appendages is broadly dilated on the distal portion with U-shaped notch on the apical margin; the lower branch varies as in the figures 9-14; the lobe in the middle of the inner surface broad and stout. The aedeagus is strongly curved ventrad.

Female genitalia as in figures (Figs.27-29).

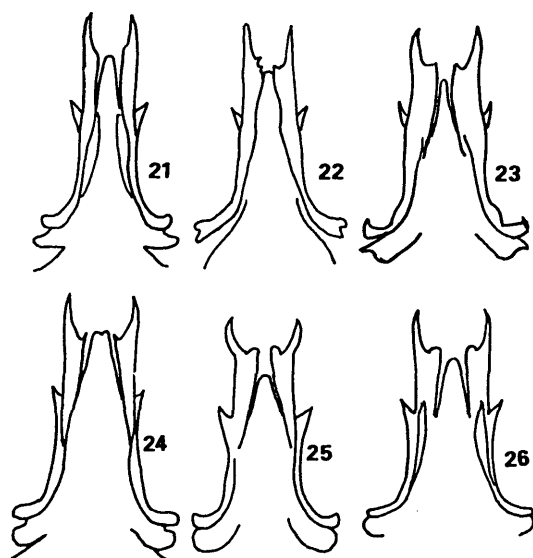
This description, together with the figures, may now enable fellow workers to recognise *Sericostoma flavicorne* from the type locality, but we must be careful with conclusions about specimens of other origin. We do not know the geographical variability of *S. flavicorne*



Figs. 9-14: *Sericostoma flavicorne*; variation of ventral lobe of the inferior appendages, ventral.

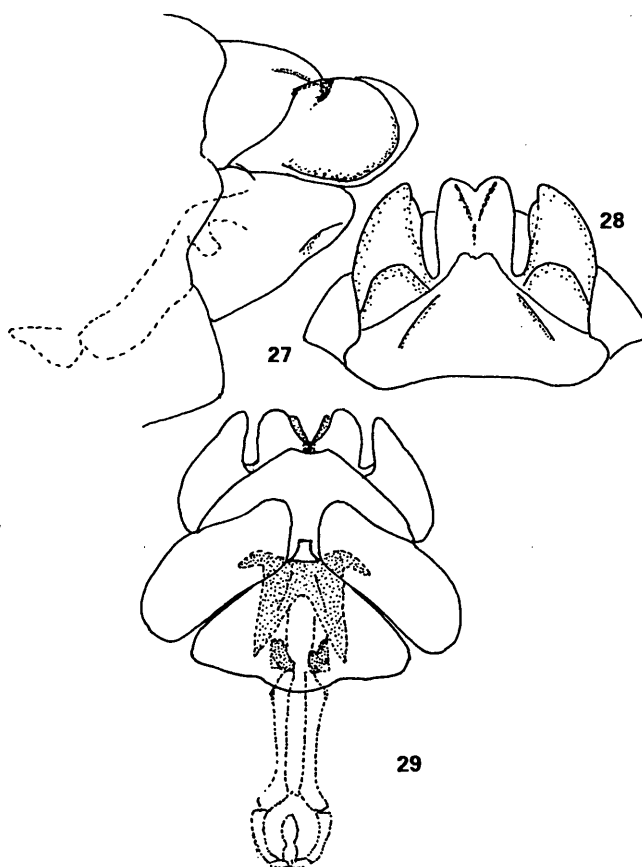


Figs. 15-20: *Sericostoma flavicorne*; variation of segment 10, lateral.



Figs. 21-26: *Sericostoma flavicorne*; variation of segment 10 dorsal.

which means that if we have specimens from other places looking differently, we do not know if they are variables or belong to other species. In Turkey alone, we can distinguish a minimum of five other closely related "populations", not to mention the many confusing "species" from southern and central Europe. Much careful work is necessary to clear the relations definitely. Crossbreeding experiments may be helpful.



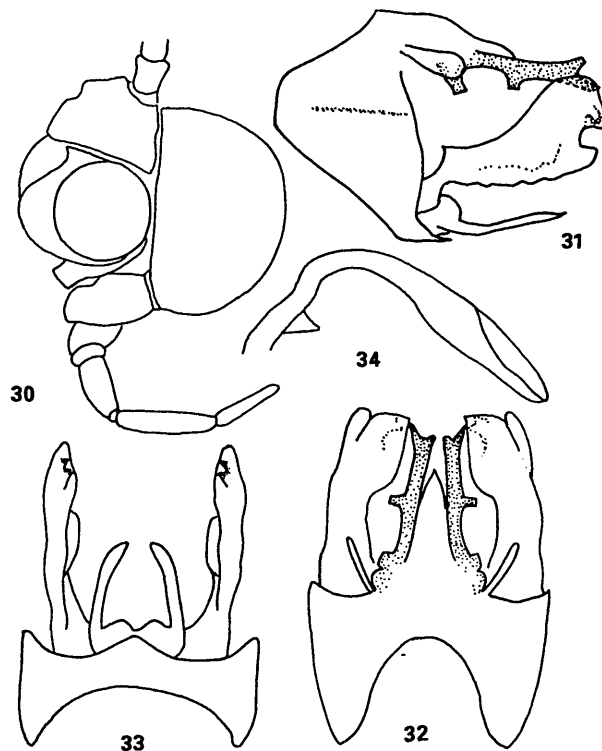
Figs. 27-29: *Sericostoma flavicorne*; female genitalia; 27, lateral; 28, dorsal; 29, ventral.

#### *Sericostoma ida* sp.n.

The first 8-9 segments of the antennae are annulated in the subapical part. Maxillary palpi are very large (Fig. 30). Length of the anterior wing of males 10-10.5 mm, of females 10.5-11 mm. Male genitalia (Figs. 31-34): Anterior margin of segment 9 is dilated on the sides forming rather smooth margin medially; in ventral view, the posterior margin is somewhat dilated on the median part. The preanal appendages are oval. In dorsal view, segment 10 is triangular in shape and the apex is pointed. The median lobe of the sclerotized prolongations of segment 10 is short and quadrangular in shape; in dorsal view they are directed on the sides, connecting to the sclerotized prolongations with right angle; in lateral view, it is directed ventrad; the basal projection is also quadrangular in shape; the edge of sclerotized prolongation between the basal and the median projections is excised in a semicircular manner. The subdistal part of the lateral prolongations is rather thick, almost smooth, protruding a small inner projection subdistally; the apex is pointed. The inferior appendages are rather narrow on the basal half and dilated apically; there is a flat and long lobe on the inner surface. The aedeagus is strongly curved downwards, with a small triangular lobe at the base.

This species was found in the Kazdag (Ida Mountains) in northwestern Anatolia. Holotype male and paratypes (3 females): Turkey, Balıkesir, 25 km east of Edremit, Güre-Zeytinli, Kazdağları, 400 m, Ayı deresi, (39° 40' N; 26° 49' E), 7.8.1994; other paratypes (2 males, 4 females): Balıkesir, 25 km to Bayramiç, Evciler, Ayazma Milli Parkı, 500 m, (39° 45' N; 26° 59' E), 5.8.1994, leg. and coll. Sipahiler.

*Sericostoma ida* sp.n. is closely related to *S. flavicorne* SCHNEIDER and differs from the related species by the following features: In *S. ida* sp.n., the anterior margin of segment 9 is smooth on the dilated part; the median part of segment 10 is pointed at the apex; the median projection of the sclerotized prolongation is short, quadrangular in shape, directing sides in dorsal view and ventral in lateral view; *S. flavicorne* the anterior margin of segment 9 is rounded on the dilated part, the apical margin of segment 10 is



Figs. 30-34: *Sericostoma ida* sp.n.: 30, male head, lateral; 31, male genitalia, lateral; 32, dorsal; 33, ventral; 34, aedeagus, lateral.

roundly ended at the apex, the median projection of the sclerotized prolongation is rather long, pointed at the apex and directed postero-ventral in lateral view. The differences on the apical part of the sclerotized prolongations of segment 10 are also evident.

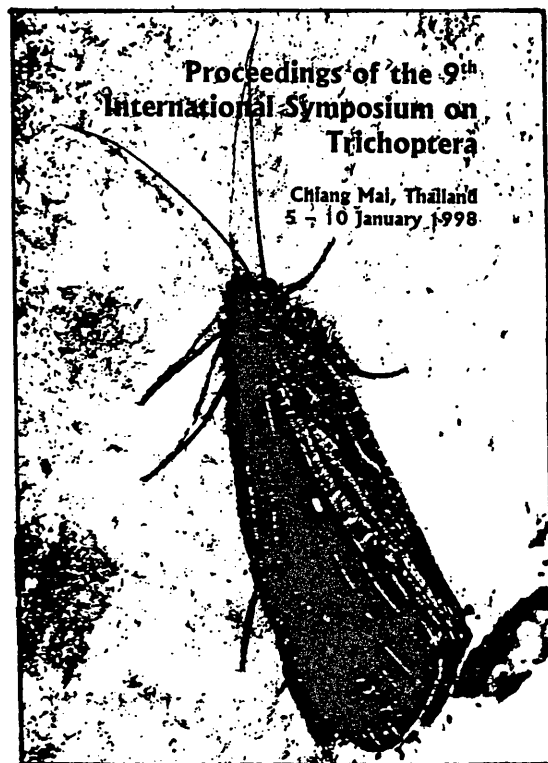
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